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Union Strength, Neoliberalism, and Inequality: Contingent Political Analyses of U.S. Income Differences since 1950

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Abstract

Do historically contingent political accounts help explain the growth in family income inequality in the United States? We use time-series regressions based on 60 years to detect such relationships by assessing interactive associations between the neoliberal departure coincident with Ronald Reagan's election and the acceleration in inequality that began soon after Reagan took office. We find evidence for this and for a second contingent relationship: stronger unions could successfully resist policies that enhanced economic inequality only before Reagan's presidency and before the neoliberal anti-union administrations from both parties that followed Reagan. Politically inspired reductions in union membership, and labor's diminished political opportunities during and after Reagan's presidency, meant unions no longer could slow the growth in U.S. inequality. Coefficients on these two historically contingent interactions remain significant after many additional determinants are held constant. These findings indicate that political determinants should not be neglected when researchers investigate the determinants of U.S. inequality.

Keywords

politics and inequality, power resources, historically contingent outcomes

> ". . . the history of income and wealth is always deeply political, chaotic, and unpredictable. How this history plays out depends on how societies view inequalities and what kinds of policies and institutions they adopt to measure and transform them."
>
> –Thomas Piketty (2014:35)

What determinants account for the recent sharp growth in U.S. income inequality? In a striking reversal in the long and mostly unbroken trend toward greater economic equality in affluent democracies (Lenski 1966), U.S. income differences have grown explosively since 1968. This departure, although present in many other wealthy democracies, has not been as substantial elsewhere (DiPrete 2007). Scholars suggest this reversal has been neglected (DiPrete 2007; Kenworthy 2007; Leicht 2008; Morris and Western 1999; Myles 2003), despite the discipline's intense focus on U.S. stratification in the past. Although a modest rebirth in research on this issue has

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occurred, the new literature on inequality focuses primarily on cross-national analyses.[1] But the United States is exceptional. Cross-national studies therefore may miss the factors that best explain why the U.S. increase in inequality has been so pronounced.

In contrast to accounts in economics that stress education, a few skeptical economists (Card and DiNardo 2002; DiNardo, Fortin, and Lemieux 1996), along with many sociologists and political scientists (Bartels 2008; DiPrete 2007; Rosenthal 2004), suggest that political accounts explain diminished union strength and other policies that contributed to this acceleration in inequality. Reductions in union strength should accelerate inequality for two reasons: First, strong unions decrease within-firm earnings differences (Card 2001). Second, before the politically induced decline in union strength documented by Tope and Jacobs (2009), unions probably were the most effective advocate for public policies advantageous to the less affluent (Greenstone 1977) that weakened this growth in inequality (Western and Rosenfeld 2011).

Evidence indicates that the Reagan administration and subsequent neoliberal administrations from both parties successfully used their appointments to the National Labor Relations Board, which closely regulates labor-management relations, to obstruct union efforts to organize new workplaces (see Figure 1 in Tope and Jacobs [2009] and their regression results). Despite these considerations, politics has been neglected in studies that attempt to explain this sharp growth in income inequality. It follows that a study of the historically contingent relationships between neoliberal presidential administrations, union strength, and this outcome may uncover theoretically useful new findings and begin to fill this political gap in the literature.

Our primary thesis is that neoliberal presidential administrations from both parties after the 1980 election of Ronald Reagan helped produce substantial decreases in union influence both in national politics and within firms. In addition to their effects on labor relations, neoliberal policies contributed to this expansion in inequality in other ways. We employ time-series regressions specified with period interactions to determine if two historically contingent relationships help explain the U.S. acceleration in inequality after 1980, but we assess additional accounts. Instead of attempting to explain inequality in multiple nations, we follow Volscho and Kelly (2012) and conduct a time-series analysis in one for important reasons: In comparison to other wealthy democracies, the U.S. expansion in income inequality has been more extreme. The political regulation of labor markets is exceptional in the United States as well, partly because, in contrast to their European counterparts, neoliberal U.S. conservatives are far more hostile to collective bargaining (Harvey 2005).[2]

To begin to fill gaps in the sparse systematic literature on the connections between neoliberal politics, the political resources of the labor movement, and the growth in U.S. inequality, we analyze shifts in family income differences. Since the late 1940s, the Census has supplied yearly statistics on family income inequality measured with a Gini index. This series may provide the best picture of how the U.S. distribution of economic resources and life chances has changed in the past 60 years. Although these methodological decisions produce an analysis that is somewhat insensitive to the escalating gap between the extremely rich and other citizens, this fissure has been ably explored by Volscho and Kelly (2012). We focus instead on the politically induced, historically contingent changes in union strength, and how these shifts influenced economic differences between families in the lower half of the income distribution and their more affluent counterparts. One goal is to explain why the real incomes of families near to or somewhat below the median stagnated, partly because Kenworthy (2004) suggests this stagnation had a powerful influence on the post-1980 acceleration in income inequality.[3] Such a focus makes the Gini index optimal, because this inequality measure is most influenced by differences close to distribution midpoints.

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THEORY

Overview

The power resource approach that is popular in comparative political sociology provides the primary conceptual foundation for this analysis (for reviews, see Brady and Sosnaud 2010; van den Berg and Janoski 2005). According to Korpi (1985:38), "In view of the importance which organizations for collective action can play for increasing the effectiveness of wage-earner power resources in relation to those of business interests, . . . the degree of subordination of wage earners can vary over time . . . as a result of the extent to which employees are organized for collective action in unions and in parties based on the working class." But unlike many other wealthy democracies, no significant recent political party dedicated to worker interests has emerged in the United States. This fact provides another reason to suspect that efforts to assess the political determinants of U.S. inequality with a cross-national approach will be problematic. We focus instead on shifts in the resources of the anti-union neoliberal factions within both U.S. political parties to determine if these fluctuations help explain the sharp reversal in the trajectory of inequality in this exceptional nation.

Korpi (1985:38) goes on to show how the power resource perspective explains economic inequality: "Variations in the differences in power resources between the classes can be assumed to have significant consequences for distributive policies. . . . [T]he power resource approach leads to the hypothesis that the extent of bias in the functioning of the state can vary considerably as a reflection of the distribution of power resources . . . [such that] politics can be expected to matter for the distributive processes in society." This perspective, with its stress on dynamic shifts in the relative political resources of business and wage earners, provides theoretical grounds for hypotheses about how neoliberal administrations and the political weakening of unions contributed to the remarkable U.S. expansion in income differences. We assess period interactions between neoliberal presidential administrations and union strength to determine if these contingent relationships help explain this singular growth.

Two Periodized Political Hypotheses

Control over the state by neoliberal anti-union factions in both political parties should be an important power resource for employers in their unremitting distributive struggles with labor.[4] Because relations between business and labor are subject to such close political control, these regulatory practices often have been used to weaken labor's organizational capacities (Tope and Jacobs 2009). The resulting decreases in union strength contributed to the failure of the incomes of the less prosperous to keep pace with the incomes of the affluent (Card 2001; Card and DiNardo 2002; Freeman 2007). Yet consistent with a historically contingent view of political change, such associations are likely to be interactive rather than additive because they differ by period.

One departure is especially plausible. In 1981, a political reversal occurred when Ronald Reagan became president (Dark 1999; Guetzkow 2010; Harvey 2005; Tope and Jacobs 2009). The more moderate postwar Republican presidents before Reagan accepted most of the New Deal labor and welfare reforms, but Reagan did not. Unlike prior Republican presidents, Reagan was devoted to neoliberal principles (Centeno and Cohen 2012; Harvey 2005); he was convinced governments should make every effort to avoid interfering with labor markets. Reagan opposed collective bargaining and political attempts to protect less prosperous families from destructive labor market fluctuations (Harvey 2005).

Reagan's resolute anti-union stance partly was based on sympathy for policies that advantaged the more neoliberal party's affluent base. The prosperous core supporters of the Republican Party often profit from cheap labor and wish to avoid higher taxes. Tax policies that benefit the affluent, but at least

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indirectly enhance burdens on less prosperous citizens, were more likely after Republican presidents took office (Allen and Campbell 1994; Bartels 2008). During Republican presidencies, macroeconomic policies also favored the affluent by stressing curbs on inflation rather than lowering unemployment. Such decisions increased the economic distance between the less prosperous, who suffer most from recessions, and the affluent, who do not experience equivalent losses (Bartels 2008; Blank and Blinder 1986; Hibbs 1987). Cross-national evidence (Brady and Leicht 2008; Navarro and Shi 2001; Sassoon 1996) suggests that these neoliberal macroeconomic policies may be more influential than union and left party support for other policies.

Because they view attempts to regulate labor markets and assist labor as inequitable assaults against owner property rights and as ill-advised interferences that weaken the (allegedly) efficient ways in which competitive labor markets operate, neoliberals are united in their distaste for collective bargaining (Thorne 1990). When Reagan broke the PATCO air controllers strike in 1981, he made a vivid statement. This almost unmatched postwar anti-union triumph—which Reagan undertook despite this union's support when he faced an uphill battle in the 1980 election by running against an incumbent—sent a clear signal about Reagan's views that was reinforced by his administration's other anti-union policies. According to one observer, "there was in the Reagan-Bush era a systematic attempt to reverse as much labor law doctrine as possible" (Dark 1999:177).[5]

This 1981 departure is historically well documented. Although management won some defensive political battles by blocking labor initiatives immediately before Reagan took office, offensive victories "for the proponents of a pro-capital economic policy came with the election of Ronald Reagan and the implementation of his economic program" (Akard 1992:607). The "class based political conflicts that emerged were resolved in favor of capital through significant reductions in the power of labor. . . . By the early 1980s, labor and progressive interests were nonparticipants in the policy process" (Akard 1992:611). This anti-labor stance had additional effects. After Reagan broke the air controllers strike, increases in employer willingness to "stop playing by the rules" occurred. Employers "began aggressively to oppose new organizing, . . . delay and contest union recognition elections, fire union activists, and hire antiunion consulting firms" (Voss and Sherman 2000:311). Reagan's aversion for labor implied that his administration might not curb such practices, even when they were illegal (for other historically based claims about timing, see Gerring 1998; Harvey 2005; Levy and Murnane 1992).

This anti-union conduct suggests that Reagan and subsequent neoliberal presidents from both parties aggravated the prior slow growth in inequality. Recall that strong unions compress within-firm earnings differences (Card 2001).[6] Before Reagan, when unions were stronger, they likely were the most powerful interest group that lobbied for redistributive policies (Greenstone 1977; for U.S. evidence, see Mosher 2007; Mares 2004, Moene and Wallerstein 1995, and Rueda and Pontusson 2002 find cross-national evidence for such effects): in addition to their pressure for federal minimum wage increases, other examples include union support for Medicaid (Derickson 1994) and opposition to cuts in federal food stamp programs (Western and Rosenfeld 2011). The politically induced decreases in union strength documented by Tope and Jacobs (2009), however, led to significant reductions in labor's ability to act politically to assist the least prosperous. For example, union members accounted for 25 percent of U.S. political activity in 1967, but this percentage fell to 18 percent in 1990 and to 11 percent by 2006 (Schlozman, Verba, and Brady 2012).

Such considerations suggest that unions were sufficiently influential politically to reduce the growth in inequality before 1981. But after Reagan took office and during subsequent neoliberal presidencies, federal policies reduced unions' potency (Tope and

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Jacobs 2009). This meant that after 1981, unions could no longer successfully oppose the multiple political outcomes that increased inequality following the Reagan neoliberal political departure (Akard 1992). Power resource logic therefore suggests we should find evidence for two historically contingent hypotheses. First, because political efforts to weaken unions were less successful before the Reagan-inspired neoliberal shift and because strong unions reduce inequality or at least retard its growth, *union strength interacted with a* pre-*Reagan period indicator should have a negative influence on income inequality after main effects and other important determinants are held constant.*

Second, because the power resource approach suggests that the Reagan neoliberal departure enhanced the power resources of business and the affluent relative to labor's resources, it is likely that *a statistical interaction between the presence of Republican presidents and a period indicator that captures the post-1980 neoliberal shift should have a positive relationship with income inequality after main effects and other determinants are held constant.* This positive association is plausible because many of the neoliberal policies supported by Reagan and by subsequent neoliberal administrations probably led to increased inequality. Yet a significant part of this increase may be attributable to neoliberal policies that influenced inequality in ways that did not affect unions.

Perhaps Reagan's close ideological ally Margaret Thatcher best summarized the most essential principle of their shared creed when she claimed, "It is our job to glory in inequality and to see that talents and abilities are given vent and expression for the benefit of us all" (quoted by Wade 2012:21). In this study, we assess this project's success in the United States.

Additional Political Determinants

Because the Democratic president with the longest tenure after Reagan was probably the most neoliberal of all postwar Democratic presidents, we control for Clinton's two terms. Before his presidency, Clinton chaired the Democratic Leadership Council. This organization was dominated by neoliberal "New Democrats" who opposed collective bargaining and other center-left policies (Hacker and Pierson 2010). As president, Clinton supported globalization by signing into law the NAFTA free trade agreement. Clinton backed market-driven welfare reforms and sanctioned additional policies that further deregulated the financial industry, including the Interstate Banking Act of 1993, the Gramm-Leach-Bliley act of 1999, and the Commodity Futures act of 2000 (Bonica et al. 2013). Evidence showing that the Clinton administration's labor policies harmed unions (Tope and Jacobs 2009) therefore should not be surprising. Because it is likely that these Democratic neoliberal policies contributed to an acceleration in inequality, we expect the independent relationship between Clinton's presidency and inequality will be positive.

In addition, the more neoliberal Republican Party's strength in the Senate and the House of Representatives should enhance the political resources of Republican neoliberal presidents. Control of Congress ought to facilitate Republican efforts to obtain legislation beneficial to their affluent base—which should place greater economic burdens on the less affluent, at least indirectly. We control for the Republican Party's Congressional strength.

Other Economic and Social Determinants

Economic factors. Recent scholarship has productively focused on the critical importance of financialization (Davis 2011; Krippner 2005, 2011; Lin and Tomaskovic-Devey 2013; Tomaskovic-Devey and Lin 2011). Many firms that had specialized in other endeavors began to profit from purely financial undertakings during the great expansion in inequality. This change occurred partly

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because important financial activities were deregulated by Reagan appointees and by subsequent neoliberal administrations (Tomaskovic-Devey and Lin 2011). Lin and Tomaskovic-Devey (2013:1294) analyze the determinants of within-industry income inequality and find that financialization increased economic stratification, probably by enhancing the "negotiating power of owners and executives in the compensation-setting . . . process."

The dominant explanation in economics for the reversal in inequality centers on schooling. Most economists believe that technologically driven increases in the demand for employees with education-derived expertise produced higher earnings, especially for those with college degrees (for criticisms, see Card and DiNardo 2002 and DiPrete 2007; for a sociological analysis, see Liu and Grusky 2013). This claimed growth in the demand for such workers occurred when the real earnings of the less educated remained stagnant. This account suggests that a positive relationship should exist between college education rates and economic inequality.

Macroeconomic shifts in the demand for labor should affect inequality because low-wage workers are first to be laid off in recessions. When economic downturns begin, firms attempt to retain their most productive employees—who contribute more to firm revenues than their less skilled and less well-paid counterparts. Increased joblessness should enhance income differences (Blank and Blinder 1986) because unemployment disproportionately harms the less affluent (Sum and Khatiwada 2012). Total production may affect inequality as well. When there are greater surpluses in economies increasingly dominated by elites, these citizens will acquire still larger resource shares and inequality will expand (Lenski 1966). Shifts in the degree to which the U.S. economy is exposed to international trade also may increase inequality, because wages should not grow as quickly after a growth in low-wage foreign competition.

Reductions in manufacturing should enhance inequality as well, because such firms often pay wages close to the median (Freeman 2007). Most wages in the competitive service sector are modest (Freeman 2007), however, partly because labor represents a greater share of total costs in these industries. The intense price competition that service sector firms often face reduces their ability to pass forward greater wage costs with higher prices. Because such firms resist wage increases, expansions in service sector employment should lead to greater inequality. A growth in stock values disproportionately benefits the affluent, so we assess these shifts. Because major strikes are the best available longitudinal measure of labor militancy and economic protests, we evaluate this determinant as well.

Social accounts. The extended growth in female employment should compress income differences because research indicates this expansion improved the relative economic standing of less prosperous families (Cancian and Reed 1999; Moller, Alderson, and Nielsen 2009). Shifts in the proportion of children or the elderly may alter income distributions because citizens in these age categories are unlikely to report high earnings. Finally, growth in the percentage of female-headed families should produce greater income inequality.

METHODS

Dependent Variable, Sample, and Estimation

We begin with the earliest and latest available Census Gini index statistics on dispersion in family incomes. Because the index we analyze measures income differences in the year before the data were collected, we lag all explanatory variables by at least a year. Lags, moving averaged political variables, first-differenced variables, and series start and end points produce a 60-year sample that begins in 1951 and ends in 2010.[7]

We estimate with OLS, but we adjust the standard errors for heteroskedasticity with the White correction.[8] Both the augmented Dickey-Fuller and the Phillips-Perron tests suggest that a unit root may be present in this

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dependent variable. We first-difference because this remedy is the simplest correction for unit root disturbances. The coefficients on such differenced variables have the same interpretation as they would if variables were left in undifferenced (or level) form. Although it yields conservative estimates, first-differencing offers benefits: this transformation helps eliminate spurious relationships by removing mutual trends in variables. We reduce the effects of rapidly dissipating shocks that often appear in models based on differenced variables by entering a moving average term (often employed in ARIMA models) lagged by a year.[9]

Most continuous variables are logged unless this transformation ruins variable explanatory power. This transformation reduces serial correlation in these models, and it offers another advantage: when both the dependent and explanatory variables are logged, the point estimates are elasticities. Such coefficients allow direct comparisons of explanatory variable effects. An elasticity coefficient of .65, for example, indicates that a 10 percent change in the explanatory variable in question would produce a 6.5 percent change in the dependent variable. We estimate with the most popular time-series macroeconometric package (EViews version 7.1) using default start values for most models.

Explanatory Variable Measurement

Political effects. We assess Republican presidencies with a dummy variable, and we include another dummy coded 1 for the Clinton years. We measure Republican congressional dominance with the mean percentage of Republicans in the House of Representatives and Senate. To assess the enduring effects of the Reagan revolution, we create a third dummy variable coded 1 for all years after 1980. These political variables are moving averaged by two years to assess delays, because it is unlikely that political determinants will have immediate effects on inequality. The cumulative political influences captured by these moving averaged variables enhance model explanatory power. Because we expect the period dummy variables coded 1 for the years during and after or before the Reagan presidency to have accelerative or deaccelerative effects on inequality, these variables are not differenced. A variable in level form used to explain a differenced dependent variable captures such (de)accelerative effects.

To assess the effects of the Reagan neoliberal departure, we create an interaction by multiplying the post-1980 dummy variable and the dummy variable coded 1 if Republicans held the presidency and 0 otherwise. With the Republican president and the post-1980 main effects held constant, a significant positive coefficient on this interaction would support a claim that the shift to this neoliberal Republican president in 1981 had greater positive effects on inequality than did the more moderate postwar Republican presidents before Reagan.

Economic and social measures. We capture business cycle effects with unemployment rates and with real (in 2005 dollars) gross domestic product (GDP) per capita. We measure female employment and female-headed families with the appropriate percentages. College education rates are assessed with the percentage of citizens older than 24 years with four or more years of college in two-year moving average form to maximize this measure's explanatory power. We capture citizens who are unlikely to report high earnings with the percentage younger than 16 or older than 64. Service and manufacturing employment are measured with percentages employed in these industries. We follow Kripner (2005) and Tomaskovic-Devey and Lin (2011) and capture financialization with the proportion of corporate profits from finance. Union strength is measured conventionally with the percentage of the nonagricultural labor force in unions. We quantify labor militancy with the number of major strikes involving more than 1,000 workers. Changes in wealth are assessed with shifts in the Standard and Poor 500 stock index.

To capture the effects of union strength on inequality before Reagan's anti-union policies that harmed unions (Tope and Jacobs 2009), we create a second interaction by multiplying a dummy coded 1 for the *pre*-Reagan

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years with the union strength variable. With both union strength and the period main effect held constant, a significant negative coefficient on this interaction would indicate that stronger unions diminished the growth in inequality before Reagan's presidency (see the Appendix for data sources).[10] The coefficients on union strength before Reagan, strikes, and female or manufacturing employment should be negative, but all other relationships should be positive.

Specification. The most concise specification of the core time-series model with the standard errors corrected for heteroskedasticity is

$$\begin{aligned}\text{D(INCOME-INEQUALTY)} &= \mathbf{b}_0 + \mathbf{b}_1\text{D}(\%\text{UNEMPLD}) + \mathbf{b}_2\text{D(REAL-GDP-CAP)} + \\ &\mathbf{b}_3\text{D(FINANCIALIZATION)} + \mathbf{b}_4\text{D}(\%\text{REP-CONG}) + \mathbf{b}_5\text{D(1 if CLINTON)} \\ &+ \mathbf{b}_6\text{D(1 IF REP-PRES)} + \mathbf{b}_7(\text{1 IF YR} > 1980) \\ &+ \mathbf{b}_8\text{D(1 IF REP-PRES) x YR} > 1980 \\ &+ \mathbf{b}_9\text{D}(\%\text{UNION}) + \mathbf{b}_{10}\text{D}(\%\text{UNION}) \\ &\text{x YR} < 1981 + e \qquad (1)\end{aligned}$$

with variables measured as described earlier. To deal with serial correlation and heteroskedasticity, the standard errors in a few models are corrected with a Newey-West approach. The many controls we employ to assess alternative explanations are added to this core model or to an equivalent one that captures the effects of specific neoliberal presidents. All required main effects are present and all explanatory variables are lagged by at least a year.[11]

ANALYSES

Descriptive Statistics and Regression Analyses

Descriptive statistics. Table 1 shows the expected signs and variable statistics. Figure 1 shows the trajectory of inequality and three explanatory variables. Inequality began to grow in 1968, but its growth accelerated after 1981 when the neoliberal departure began. If we regress inequality from 1968 to 1993 on a linear trend and then add the square of this term in a second regression, the coefficient on the squared term is positive and significant to beyond the .001 level. The explanatory power of this quadratic model is greater than the single variable non-quadratic model (not shown). Despite the addition of a second (squared) term, the BIC score for the quadratic model decreases from –.186 to –.196, indicating the superiority of this nonlinear specification. Comparisons of coefficients on a linear trend, when two one-variable regressions are restricted to data from the pre- or post-Reagan years, provide added reasons to believe that inequality accelerated during the Reagan and George H. W. Bush presidencies.

The most pronounced increase in this Gini index, if four-year presidential terms are appropriately lagged by a year, took place in the first Bush presidency when inequality grew by .028. The largest reduction (.019) took place in Truman's last term, when the postwar economy had not approached equilibrium. The second largest (.018) decrease occurred in Kennedy's almost three-year term completed by Johnson. Although these contrasts are interesting, they ignore union effects and other factors that should explain inequality.

Initial regressions. We begin the multivariate analyses with a base-line model that does not test interactions. In Model 1 in Table 2 we enter unemployment, economic growth measured by GDP, the percentage of Republicans in the House and Senate, financial profits, a dummy coded 1 for Clinton's presidency along with a Republican president dummy, union strength, and the percentage with at least four years of college. In Model 2 we add a main effect coded 1 for years during and after Reagan's presidency, as well as an interaction between this neoliberal period variable and Republican president presence. We enter a second interaction in this model that captures union density in the *pre*-Reagan years. In Model 3 we replace the ineffective education measure with service sector employment.

The results in Model 1 provide a vivid contrast with those that follow. These initial

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Table 1. Expected Signs, Means, and Standard Deviations

Variable	Expected Sign	Mean	Standard Deviation
Income Inequality (Gini)		.388	.033
% Unemployed	+	5.682	1.522
Real GDP per Capita	+	26,698.430	9,498.075
Financial Sector Profits	+	.217	.086
% Republicans in Congress	+	44.296	6.140
1 if Clinton President	+	.133	.343
1 if Republican President	+	.600	.494
% in Unions	–	22.615	7.464
% 24+ with 4+ Years of College	+	16.638	7.401
% Employed in Service Industries	+	56.499	7.189
% Women in Labor Force	–	40.359	5.822
Standard and Poor 500	+	377.023	449.146
% Employed in Manufacturing	–	18.699	6.168
Major Work Stoppages	–	176.883	146.827
% Population < 16 Years	+	26.490	4.009
% Population > 64 Years	+	10.939	1.565
(Imports + Exports)/GDP	+	.027	.069
% Female-Headed Families	+	13.835	3.030

Note: $N = 60$; explanatory variables are lagged by a year but not logged.

findings show that inequality grew during Clinton's presidency. Increased financial activity and a growth in college education rates have positive relationships as well. Stronger unions and economic growth reduce inequality, but the coefficients on the remaining explanatory variables, including the coefficient on Republican presidents, are nonsignificant in this model, which does not include interaction effects that assess historical contingencies.

In Model 2, after we add the interaction that captures the neoliberal departure initiated by Reagan along with the interaction that assesses union strength effects before Reagan, model explanatory power sharply increases. These results suggest that the Reagan neoliberal political departure produced a growth in inequality. Because the dependent variable is logged, the sum of the coefficient on the post-1980 Republican president interaction term and the coefficient on the Republican president main effect (see Western and Kleyclamp 2004) indicates that neoliberal Republican administrations independently produced a 3.6 percent ([.008 + .028] x 100) expansion in inequality during the years these administrations held office. These results indicate that the only neoliberal Democratic president after Reagan (Clinton) had an even stronger (7.2 percent) effect on inequality during his shorter eight-year tenure.

Because both inequality and union strength are logged, the sum of the coefficient on the pre-Reagan–union strength interaction term and the coefficient on the union main effect ([.029 + –.273] x 100) suggests that a 10 percent increase in union strength before Reagan would have elicited a 2.4 percent reduction in inequality. If the financial profits variable is logged, it has no explanatory power, so this coefficient is not an elasticity. Although this point estimate cannot be compared to the other coefficients, financialization has significant positive effects on inequality. Such results support Lin and Tomaskovic-Devey's (2013) findings. When we replace the now ineffective education variable with service sector employment in Model 3, the results are theoretically identical.[12] The same explanatory variables are significant with similar point estimates, but shifts in service sector

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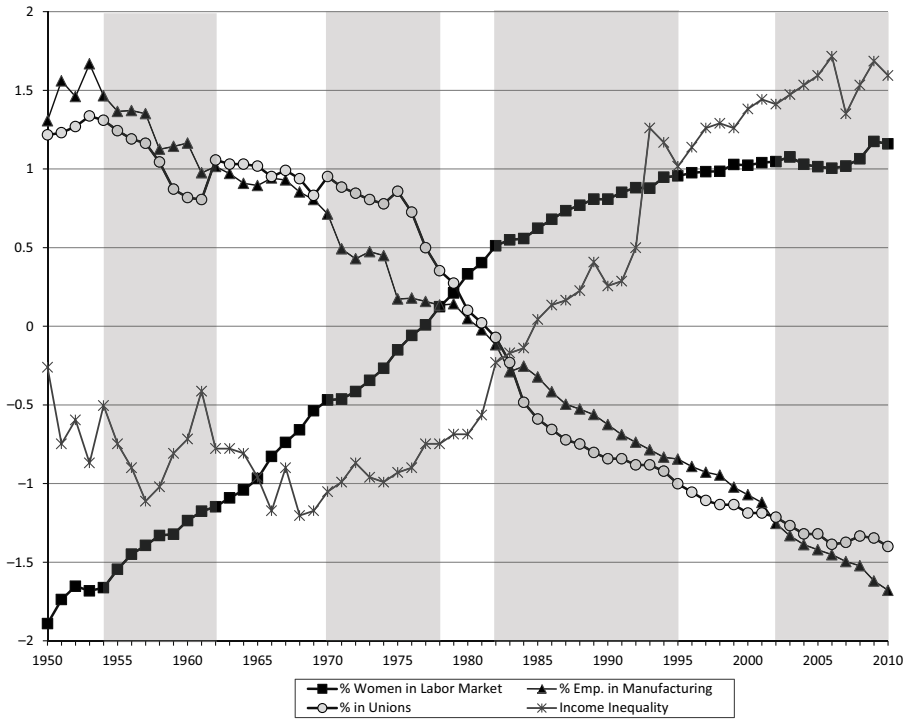

Figure 1. Trends in Economic Inequality and Assorted Explanatory Variables
Note: Variables are in standard deviation units; gray areas denote Republican presidencies lagged by a year.

employment do not explain the growth in inequality.

The statistical significance of the interaction terms in Models 2 and 3 confirms our period expectations, as they indicate that these two contingent effects explain the expansion in U.S. inequality. Such results suggest that Reagan's neoliberal presidency led to an acceleration in inequality, and this acceleration was sustained by subsequent neoliberal Republican and Democratic administrations. The findings also imply that while unions limited the expansion in inequality before Reagan, they could not counteract this expansion after Reagan took office. But these contingent relationships may not persist after other controls are introduced.

Additional regression models. In Model 4 in Table 3 we add the percentage of women in the labor force. In Model 5 we replace that variable with the stock value measure, and in Model 6 we replace stock value shifts with manufacturing employment. These new results show that the variables that were always significant in Models 2 and 3 remain so in Models 4, 5, and 6. The same theoretically important contingent presidential and union results survive these three tests, but none of the newly entered variables matter.[13] The financial profits measure remains significant, with coefficients similar to those in Models 2 and 3 in all three models in Table 3, but unemployment and economic growth explain inequality only in the last model. The survival of the contingent neoliberal presidential and union effects, however, is the most theoretically important feature of these results.

In Table 4, after we add major strikes in Model 7, imports and exports in Model 8, female-headed families in Model 9, and the two age variables in Model 10, most of these results support prior conclusions. The two

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Table 2. Estimates of the First-Differenced Determinants of Family Income Inequality, 1951 to 2010

	Model 1.		Model 2.		Model 3.	
Explanatory Variables	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error
Ln % Unemployed $_{t-1}$	−.021	.012	.030	.028	.026	.031
Ln Real GDP per Capita $_{t-1}$	−.273**	.065	.133	.168	.147	.155
Financial Sector Profits $_{t-1}$	.153**	.047	.117**	.043	.098*	.039
Ln % Republicans in Congress $_{t-2}$	−.017	.029	−.001	.001	−.032	.031
1 if Clinton President $_{t-1}$	.040**	.009	.073**	.015	.058**	.016
1 if Year > 1980			.009**	.003	.010**	.002
1 if Repub. President $_{t-1}$	.007	.008	.009	.007	.005	.009
1 if Repub. Pres. $_{t-1}$ x 1 if Year > 1980			.029*	.013	.024*	.012
Ln % in Unions $_{t-1}$	−.121**	.041	.036	.068	.066	.087
Ln % in Unions $_{t-1}$ x 1 if Year < 1981			−.270*	.133	−.318**	.104
% 24+ with 4+ Years College $_{t-2}$	.018**	.004	.008	.008		
Ln % Employed Service Industries $_{t-1}$					.344	.388
Intercept	.000	.002	−.008**	.003	−.008*	.004
R^2 (corrected)	.386**		.483**		.452**	
Durbin-Watson	1.824		2.085		2.083	

Note: $N = 60$; standard errors are corrected for heteroskedasticity. Political, union, and education explanatory variables are in two-year moving average form to account for lags and cumulative effects. All variables but two are first-differenced; to capture (de)accelerative effects both period dummy variables are in level rather than first-difference form. All models include an ARIMA moving average term lagged by a year. In Model 2, the standard errors are estimated with the Newey-West approach to correct serial correlation detected by the Breusch-Godfrey Lagrange Multiplier Test.
*$p < .05$; **$p < .01$ (two-tailed tests).

interactive findings persist in the first three models. Elasticities again suggest that the effects of these two contingencies remain about the same, but macroeconomic effects continue to be inconsistent. Even though the coefficients on the percentage of children and the elderly are nonsignificant, entering these explanatory variables creates enough collinearity to reduce the contingent presidential and union effects to nonsignificance in Model 10.

Yet it is possible that the two contingent findings will not survive if we enter separate dummy variables that capture the independent effects of each neoliberal administration. Model 11 in Table 5 shows these results, and Model 12 reveals what happens when we again enter the two collinear variables that assess the effects of children and the elderly. The union contingency and two neoliberal administrations remain significant in Model 11. In contrast to Model 10, however, the union contingent effect now survives the inclusion of the two collinear demographic determinants in Model 12, yet the children and elderly presence measures again are nonsignificant. Both models indicate that the Reagan and Clinton administrations had the most influential effects on inequality. Such findings also suggest that the Clinton effects in prior models are not statistical artifacts. Figure 2 shows the predictive power of Model 5 after the predictions are transformed from first differences to levels. These predicted values closely track actual changes in inequality and suggest that our models have substantial explanatory power.

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Table 3. Estimates of First-Differenced Determinants of First-Differenced Family Income Inequality, 1951 to 2010

	Model 4.		Model 5.		Model 6.	
Explanatory Variables	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error
Ln % Unemployed $_{t-1}$	.035	.022	.028	.027	.076**	.026
Ln Real GDP per Capita $_{t-1}$	.130	.112	.152	.155	.386*	.150
Financial Sector Profits $_{t-1}$	.110**	.040	.132**	.045	.079*	.036
Ln % Republicans in Congress $_{t-2}$	−.016	.027	−.028	.029	−.029	.031
1 if Clinton President $_{t-1}$	.070**	.011	.073**	.014	.059**	.012
1 if Year > 1980	.007	.004	.010**	.002	.014**	.003
1 if Repub. Pres. $_{t-1}$	.004	.007	.007	.008	.005	.008
1 if Repub. Pres. $_{t-1}$ x 1 if Year > 1980	.032**	.009	.030*	.012	.026*	.010
Ln % in Unions $_{t-1}$	−.040	.064	−.017	.061	.006	.054
Ln % in Unions $_{t-1}$ x 1 if Year < 1981	−.305**	.088	−.264**	.096	−.345**	.106
Ln % Women in Workforce $_{t-1}$	−.291	.258				
Ln Standard & Poor 500 $_{t-1}$			.019	.014		
Ln % Employed in Manufacturing					.162	.122
Intercept	−.003	.005	−.006	.005	−.011**	.003
R^2 (corrected)	.399**		.486**		.456**	
Durbin-Watson	1.908		2.011		1.885	

Note: $N = 60$; standard errors are corrected for heteroskedasticity. See note under Table 2. Standard errors are adjusted for serial correlation and heteroskedasticity with a Newey-West correction in Models 4 and 5.
*$p < .05$; **$p < .01$ (two-tailed tests).

Some variables in the prior models result from neoliberal policies and thus capture intervening effects. By removing such effects we can obtain a more complete picture of how much these administrations influenced inequality. Findings (Tope and Jacobs 2009) show that the Reagan and post-Reagan neoliberal administrations damaged unions. In comparison to Democratic presidents, Republican macroeconomic policies—which focused on reducing inflation rather than lowering unemployment (Bartels 2008; Hibbs 1987)—may have enhanced inequality (Blank and Blinder 1986). And neoliberal deregulation policies contributed to the financialization of U.S. enterprises (Krippner 2011). Removing these intervening variables may increase the coefficient on the presidential departure variable. The reduced form model supports this conjecture (standard errors are in brackets):

$$\begin{aligned}\text{Inequality} = {} & .030(\%\ \text{Rep. Congress}) + \\ & [.035] \\ & .094(\text{Clinton}) - .011(\text{Rep. Pres.}) + \\ & [.028]^{**} \qquad [.011] \\ & .005(\text{Year} > 1980) + \\ & [.001]^{**} \\ & .065(\text{Rep. Pres. x Year} > 1980) + \\ & [.026]^{**} \\ & .027(\text{Real GDP per Capita}) + \\ & [.026] \\ & .000.\ R^2 = .187^{*}\ (N = 59) \\ & [.002]\end{aligned}$$

With the union, unemployment, and financialization intervening effects removed, the coefficient on the Republican neoliberal interaction increases substantially from .035 in Model 3 to .065, or about an 85.7 percent increase.[14] This reduced form estimate suggests that the combined policies of the Reagan and post-Reagan Republican presidents amplified inequality by about 6.5 percent. The Clinton administration effect is also

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Table 4. Estimates of the First-Differenced Determinants of Family Income Inequality, 1951 to 2010

	Model 7.		Model 8.		Model 9.		Model 10.	
Explanatory Variables	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error	Coef.	Std. Error
Ln % Unemployed $_{t-1}$	.028	.018	.038*	.016	.033	.020	.023	.033
Ln Real GDP per Capita $_{t-1}$	.115	.105	.181	.110	.144	.132	.051	.250
Financial Sector Profits $_{t-1}$	.114**	.041	.105*	.041	.111*	.045	.133**	.046
Ln % Republicans in Congress $_{t-1}$	–.016	.032	–.019	.030	–.026	.031	–.040	.030
1 if Clinton President $_{t-1}$	.064**	.013	.061**	.012	.060**	.013	.069**	.015
1 if Year > 1980	.009**	.002	.010**	.002	.010**	.002	.009*	.004
1 if Repub. Pres. $_{t-1}$	.004	.008	.005	.008	.005	.008	.007	.009
1 if Repub. Pres. $_{t-1}$ x 1 if Year > 1980	.029*	.012	.027*	.011	.026*	.011	.029	.015
Ln % in Unions $_{t-1}$	.013	.065	.007	.054	.010	.056	.006	.124
Ln % in Unions $_{t-1}$ x 1 if Year < 1981	–.315**	.114	–.299**	.106	–.285*	.120	–.232	.153
Ln Major Work Stoppages $_{t-1}$	.002	.006						
Ln (Imports+Exports)/GDP $_{t-1}$			–.016	.020				
Ln % Female-Headed Families $_{t-1}$					.051	.062		
% < 16 Years $_{t-1}$							–.282	1.767
% > 64 Years $_{t-1}$							–.356	.256
Intercept	–.006*	.003	–.008**	.003	–.007*	.003	–.004	.007
R^2 (corrected)	.427**		.450**		.465**		.467**	
Durbin-Watson	1.908		1.996		2.050		2.119	

Note: $N = 60$; standard errors are corrected for heteroskedasticity. See note under Table 2. To achieve model convergence, start values are changed to .8 x standard start values in Model 7. Standard errors are adjusted for serial correlation and heteroskedasticity with a Newey-West correction in Models 8 and 9.

*$p < .05$; **$p < .01$ (two-tailed tests).

increasingly influential in this model, reaching 9.4 percent.

The coefficients in this reduced form model, however, represent an upward bound on the estimates of presidential influence, because the administration effects on the policies captured by the deleted intervening variables almost certainly were not total. For example, unions likely would have lost members in the 1980s even if presidents sympathetic to their cause had held office, but our results suggest these losses would have been less severe. This reduced form model therefore may provide a more accurate picture of how much these neoliberal administrations influenced inequality, because some of the intervening policy variables that decrease the coefficients on presidential administrations are removed.

More generally, these findings almost always indicate that inequality accelerated during and after Reagan's presidency, but the pre-Reagan union contingency may be theoretically more important. This robust result suggests that if union membership had increased, this growth would have weakened the modest growth in inequality before the neoliberal departure. But after the Reagan turning point, our findings indicate that unions did not have as much influence on the acceleration in inequality.

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Table 5. Additional Estimates of the First-Differenced Determinants of Family Income Inequality, 1950 to 2009, That Assess the Independent Effects of Neoliberal Presidents

	Model 11.		Model 12.	
Explanatory Variables	Coef.	Std. Error	Coef.	Std. Error
Ln % Unemployed $_{t-1}$	.022	.017	.021	.028
Ln Real GDP per Capita $_{t-1}$	.071	.101	.078	.185
Financial Sector Profits $_{t-1}$	.187*	.073	.199**	.067
Ln % Republicans in Congress $_{t-1}$	−.002	.022	−.018	.025
1 if Reagan President $_{t-1}$	.024*	.011	.027*	.011
1 if George H. W. Bush President $_{t-1}$	.021	.012	.020	.013
1 if Clinton President $_{t-1}$	.037**	.014	.041*	.019
1 if George W. Bush President $_{t-1}$	−.008	.021	−.004	.017
1 if Year > 1981	.010**	.003	.011*	.004
Ln % in Unions $_{t-1}$	.007	.087	.043	.138
Ln % in Unions $_{t-1}$ x 1 if Year < 1981	−.311**	.111	−.276*	.130
% < 16 Years $_{t-1}$			.436	2.480
% > 64 Years $_{t-1}$			−.250	.218
Intercept	−.005	.003	−.005	.005
R^2 (corrected)	.453**		.484**	
Durbin-Watson	1.871		2.027	

Note: $N = 60$. See note under Table 2. Standard errors are adjusted for serial correlation and heteroskedasticity with a Newey-West correction in Models 11 and 12.
*$p < .05$; **$p < .01$ (two-tailed tests).

Model Sensitivity

Changing the timing of the political departure variable so it is coded 1 from 1969 on (instead of from 1981 on), when Richard Nixon became president and inequality started to grow, yields nonsignificant interactions and sharp reductions in model explanatory power in results not shown.[15] Altering the timing of the two periodization dummy variables so they define Reagan's predecessor (Jimmy Carter) as neoliberal generates similar acute reductions in model explanatory power. In fact, any leads or lags from one to six years that change the timing of these two periodization variables produce substantial decreases in explanatory power. Such results suggest that the 1981 timing of this departure in our reported models is correct.[16]

When we interact each of the other variables in these models with the neoliberal period or with Republican president presence, these effects never reach significance. We cannot find evidence for any additional contingencies. For example, interacting the college education rate with either the neoliberal period or with Republican president presence does not improve this variable's effects in other models not shown. A dummy variable coded for the years after 1996 when changes in federal welfare took place, and variables for out-of-wedlock births, housing prices, T-Bill rates, and the real value of the federal minimum wage, are all nonsignificant in additional models not shown.

Table S1 in the online supplement (http://asr.sagepub.com/supplemental) reports the negligible results when we interact either Republican president presence or the post-1980 neoliberal period with Republican strength in Congress. When we include the sum of the percentage of southern Democrats and Republicans in Congress to assess the influence of this conservative vote coalition,

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Figure 2. Predicted versus Actual Income Inequality

the coefficient on this term is nonsignificant. In Table S2 in the online supplement, we add immigration standardized by population, federal welfare expenditures standardized by GDP, and foreign direct investment standardized in the same way; these variables are nonsignificant and the two political contingencies survive all six tests. The theoretical implications also persist when we do not log Gini.

The stability of our estimates after so many diverse controls are entered suggests these models are correctly specified. The persistence of the two interaction effects that detect theoretically significant historical contingencies in multiple models also implies that this investigation has uncovered the most influential factors that helped determine national shifts in income inequality since 1950.

DISCUSSION

Findings

Although the primary theoretical impetus for this study involved a focus on the contingent effects of union strength and neoliberal politics, other accounts matter. The results occasionally suggest that unemployment and economic growth explain inequality, but we remain uncertain about these effects because they often are nonsignificant. The findings also indicate that the union and political contingencies detected in this study seem to have more important effects than college education rates. Demographic accounts, postindustrial workforce shifts between economic sectors, strikes, the growth in female-headed families, and women's labor market participation rates are also nonsignificant.

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Yet financialization had robust positive effects on inequality in all 12 models in the text and in the six models reported in Part A of the online supplement. Such findings support Krippner (2005, 2011), Davis (2011), Tomaskovic-Devey and Lin (2011), and Lin and Tomaskovic-Devey (2013) who find that the corporate embrace of financial profits helped create increased inequality. This predictive success offers reasons to believe that our models capture both the stagnation in less affluent family incomes largely attributable to diminished union strength *and* the growth in the incomes of the affluent brought about by financialization. Such findings suggest that both factors operated together to help explain the unprecedented U.S. expansion in economic inequality.

But the results are mildly surprising because they never show that Republican Party strength in Congress mattered. Such weak findings should not be completely unexpected, because presidential administrations are far more unified than legislative political parties. The substantial influence of veto groups in the House and Senate (Rosenthal 2004), along with the disparate regional interests within both legislative parties, probably best explains this failure.

In light of the many claims (Harvey 2005; Lobao and Hooks 2003) on how the popularity of neoliberalism altered union-management relationships in favor of employers, our contingent results reveal the importance of the lingering effects of the shift to neoliberalism in 1981. The findings in this study repeatedly show that reductions in union strength attributable to policies endorsed by Reagan and by later neoliberal administrations helped create the acceleration in inequality after 1981. The same models indicate that the neoliberal political decisions that promoted financialization in the Reagan era, coupled with added financial deregulation during Clinton's tenure (Tomaskovic-Devey and Lin 2011), contributed to this increase as well. Yet because the effects of important intervening variables are held constant, the estimates of administration effects we report in the tables may be too modest.

If we use estimates from the reduced form model reported in the text that excludes the union, unemployment, and financialization measures, we find evidence suggesting that neoliberal policies during and after Reagan's presidency had much larger effects. This explanation is supported by a comparison of the total percentage changes in inequality before and during the Reagan–George H. W. Bush presidencies. In the 12 years before Reagan's presidency, from 1970 to 1981, inequality grew by 4.53 percent, but it expanded by 11.2 percent in the 12 Reagan–Bush years from 1982 to 1993, or by 2.5 times as much.

It is just as important that policies at least partially attributable to the only Democratic neoliberal administration in the post-Reagan period had strong positive effects on this outcome. The coefficients reported in the tables and in the reduced form model reported in the text all suggest that the Clinton administration's decisions led to a growth in inequality that was larger than our estimates of the Reagan and post-Reagan Republican effects reported in the tables. These findings about the Clinton presidency—along with Tope and Jacobs's (2009) findings that Clinton's labor policies did not advantage unions—help explain this modestly surprising result. It is possible, however, that the neoliberal policies instituted by prior Republican administrations had persistent effects that helped increase inequality during the Clinton years (we cannot assess such delayed effects because the necessary earlier data is unavailable).

These conclusions are buttressed by robust results found in 18 different models indicating that a 10 percent increase in union strength in the pre-Reagan period would have reduced income inequality from 2.5 to 3 percent. These findings indicate that unions could influence inequality only before the neoliberal departure that was initiated by Reagan and sustained by subsequent administrations. The labor movement's political strength and political opportunities (Meyer 2004) that were available before Reagan, when more moderate Republican and Democratic administrations held office, declined sharply during

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and after Reagan's tenure (Akard 1992). Such findings support Korpi's power resource perspective, because the Reagan and post-Reagan neoliberal reduction in union density severely weakened this most important wage-earner power resource.

But there are problems: Early time-series data can be less than ideal. Before 1963, the Census collapsed dissimilar minority populations into a single nonwhite category. Until much longer series become available, this unfortunate decision means that minority effects cannot be assessed with an entirely longitudinal design. And the education, demographic, trade openness, labor force shifts, strikes, and stock value accounts that were ineffective in this analysis may explain shifts in inequality in future studies conducted on longer series that offer greater statistical power. Although differencing offers important statistical benefits, this specification probably produces conservative estimates. Yet it still is the case that two contingent political accounts survived this obstacle in all analyses but one.

Another possible reason for failure of the popular education and demographic accounts concerns individual versus aggregate data. Educational and demographic effects may be understated in this study owing to a data mismatch. These effects operate directly through individuals, but analyses that accurately capture political effects must use aggregate data. It probably is impossible to capture political influence on an aggregate outcome like inequality with analyses that rely only on individual data (Western 2006). Aggregate data, however, "average out" outliers and typically enhance statistical relationships. It is not clear which opposite effect best explains these educational results. While our macro approach *may* favor political explanations over educational or demographic accounts, at least it gives the latter explanations some chance to explain shifts in inequality. Recall that higher education was significant in the first reported model that omitted contingent interactions. But the two interactions used to assess political accounts almost always have sufficient power to overcome any obstacles created by the first-difference estimation approach used in this study.

The literature contains a large number of seemingly plausible accounts for this increase in inequality. If we are to proceed efficiently, we should start to identify some apparently credible candidates that have less empirical strength. Such negative results ought to be valuable as they can help to identify which plausible explanations should receive less attention. This initial analysis, however, clearly is not definitive. Higher education and the skill-based technical change (SBTC) account, along with demographic variables, may well become influential in subsequent political analyses based on aggregate data.[17] Yet our conservative estimation approach at least suggests that political accounts should not be overlooked, especially because these hypotheses remained influential when tested against so many alternatives.

Wider Implications

The recent literature on inequality is dominated by economists who tend to ignore institutional accounts despite their explanatory power (DiPrete 2007). Most economists, for example, disregard the considerable influence that political partisanship has on macroeconomic policy (Bartels and Brady 2003). Although many economists are not guilty of these sins, our findings highlight problems with the market reductionism in this literature—which sometimes appears in economic sociology as well (see Fligstein and Dauter 2007). A simple syllogism underscores a difficulty with this singular focus: Markets by definition involve the exchange of property rights. But governments define property rights. Studies of markets that ignore politics—or contests about what governments should do—therefore overlook a powerful explanation. Because omitted variable bias is such a critical problem in nonexperimental research, studies of markets that disregard politics are less likely to produce accurate findings.

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Yet except for the anti-union policies detected by Tope and Jacobs (2009) and the neoliberal policies that deregulated financial activities uncovered by Krippner (2011), Davis (2011), and Tomaskovic-Devey and Lin (2011; see also Lin and Tomaskovic-Devey 2013), we have not isolated other specific neoliberal policies that helped produce the post-1980 acceleration in inequality. The independent effects of the many narrowly targeted neoliberal policies that worked in concert to produce growth in an all-embracing outcome like aggregate inequality are difficult to detect (Bonica et al. 2013). Although the reduced form model reported in the text suggests their combined effects help explain this remarkable expansion in inequality, many of these narrowly focused policies probably were insufficiently influential *by themselves* to have statistically perceptible independent effects on such a wide-ranging outcome.

Instead, the robust explanatory power of the neoliberal administration interaction suggests that the combined influence of these many quite specific policies acted together to increase inequality. And the union effects detected in this analysis—which are largely based on the harm done to unions by neoliberal policies documented by Tope and Jacobs (2009)—show that this politically induced decline in union density had a significant influence on an even more economically universal issue. Our findings also support research by Davis, Krippner, and Tomaskovic-Devey and Lin as they show that financialization, which occurred after political decisions deregulated finance, almost certainly contributed to the growth in inequality by enhancing the highest incomes.[18]

How exactly did neoliberal administrations produce an acceleration in income inequality after 1980? These results suggest that the policies and behavior of the first neoliberal president (including his drastic response to the PATCO strike) provide an important explanation. Reagan's anti-labor National Labor Relations Board (NLRB) appointments, and those by subsequent neoliberal administrations, had direct negative effects on union organizational efforts. The administration's anti-labor rhetoric also contributed to unions' decreased influence on the shop floor. These acts sent a clear signal to employers that the NLRB and the administration would be less likely to sanction unfair labor practices—which employers then increasingly began to use (Voss and Sherman 2000). In addition to reductions in union political influence, this political conduct meant unions became less effective within firms and therefore less attractive to potential dues-paying members.

These measures also reduced union political influence by eliminating the prior political accord between labor and national administrations from both parties. Our results repeatedly indicate that the diminished political and economic influence of the most significant collective power resource that assisted less affluent citizens helped create a growth in inequality by keeping the inflation-corrected incomes of less prosperous families almost constant during a period when the incomes of the prosperous grew rapidly (Volscho and Kelly 2012). Before the neoliberal era, unions likely provided the most effective advocacy for the less affluent, but during and after Reagan's tenure this power resource was substantially weakened (Akard 1992).

Such results clearly support Korpi's power resource perspective. Recall from Korpi (1985) that fluctuations in the degree to which the political resources of different classes become more or less unequal lead to changes in the distribution of economic rewards. This study detected two important politically based shifts in power resources. First, our results show that the politically induced decrease in union influence after 1980 meant unions no longer had as much influence on inequality. This reduction in union strength helped lead to a stagnation in the incomes of those near to the middle of the income distribution, such that incomes close to the median did not match the sizeable growth in the incomes of the most prosperous. Second, our findings suggest that financial deregulation during neoliberal presidencies also contributed to this acceleration in inequality. This outcome

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probably occurred because the growth in financial endeavors enhanced the ability of owners and executives to bargain for higher rewards (Lin and Tomaskovic-Devey 2013).

This preliminary study fills other gaps in the literature. With the partial exception of research reported by Bartels (2008), no prior investigations seem to exist that detect political and union effects using historically contingent accounts to explain the puzzling growth in U.S. inequality. Instead, recent sociological research on this departure seems to focus almost entirely on nonpolitical explanations. Although several political scientists have commented on how veto groups blocked policies that would have decreased this acceleration in inequality (Bonica et al. 2013; Hacker and Pierson 2010; Rosenthal 2004), we have not located systematic research showing how empirically identifiable contingent political factors *contributed* to this growth. Our findings that highlight these effects at least indicate that political accounts should not be overlooked.

We hope this study has supplied another useful start on an answer to the question posed by DiPrete (2007) when he asked, "What can sociology contribute to the study of inequality trends?" The Census measure we analyze—which captures yearly shifts in family income inequality since the late 1940s—probably is the best long-term indicator of how the U.S. distribution of economic resources and life chances has changed, especially for families in the lower half of the income distribution. Research that detects important institutional determinants of these shifts clearly addresses fundamental sociological issues. These findings also underscore the conceptual utility of hypotheses based on a contingent version of the power resource perspective and the explanatory power of analyses grounded in political economy.

APPENDIX: DATA SOURCES

The Gini index source is the U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 2011.

Unemployment rates come from the U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey, 2012.

Gross Domestic Product data come from the Federal Reserve Economic Data, Federal Reserve Bank of St. Louis.

Data on partisanship in the House and the Senate come from the U.S. Congress, Joint Committee on Printing, Congressional Directory.

The primary union membership source is Troy, Leo and Neil Sheflin. 1985. *U.S. Union Sourcebook*. Data after 1985 come from the U.S. Statistical Abstract, various years.

The source for the percentage of the population with four years of college is the U.S. Census Bureau, Current Population Survey, 2012.

The source for female employment and employment in the manufacturing and service industries is the U.S. Department of Labor, Bureau of Labor Statistics, Current Employment Statistics, 2012.

The source for the percentage of all corporate profits coming from the financial sector is the U.S. Department of Commerce, Bureau of Economic Analysis, 2012.

The source for the S&P 500 data on stock values is Bloomberg financial information.

The number of work stoppages comes from the U.S. Department of Labor, Bureau of Labor Statistics, 2011.

The source for the population under age 16 and over 65 is the U.S. Census Bureau, Current Population Estimates, 2012.

Trade openness data come from the U.S. Department of Commerce, Bureau of Economic Analysis, 2012.

The percentage of families headed by single females is from the U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements, 2012.

The source for Southern Democrats in Congress is the Congressional Quarterly Press Congress Collection (http://library.cqpress.com/congress).

The source for immigration data is the Department of Homeland Security, Yearbook of Immigration Statistics, 2011.

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Incoming and outgoing foreign direct investment data come from the U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* various years.

Data

The data and the model estimation instructions for the analyses reported in this article can be found in the online supplement (http://asr.sagepub.com/supplemental).

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Notes

1. For reviews of recent sociological studies that have begun to address this gap, see Neckerman and Torche (2007) and McCall and Percheski (2010).
2. There are important methodological reasons for this choice: "Point in time comparisons of the level of inequality across countries impose much stronger data requirements than comparisons of trends in inequality" (Gottschalk and Smeeding 1997:640). Results based on multi-nation designs therefore may be distorted by unmeasured national differences. Although fixed-effects estimation partially overcomes omitted variable bias by holding constant any unmeasured time-invariant determinants, this problem remains a critical threat to nonexperimental statistical findings. We analyze inequality only in the United States partly because such results are less likely to be subverted by unmeasured heterogeneity.
3. We study income instead of earnings inequality because in addition to their within-firm effects, unions were probably once the most influential pressure group that lobbied for public policies in the interests of both workers and the poor. When they were strongest, U.S. unions helped increase unemployment compensation and social security payments and pushed forward many other policies that improved the incomes and economic situation of the least affluent (Greenstone 1977). While earnings clearly are important, they are not the only component of income. Income, moreover, is a superior indicator of total resources and family member life chances.
4. According to Harvey (2005:2), neoliberalism is "a theory of political economic practices that proposes human well-being can best be advanced by liberating individual economic freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices." Policies that establish completely unfettered labor markets clearly are an essential part of this ideology.
5. Another illustration of Reagan's strong aversion to unions occurred before his second inaugural. His administration insisted that workers hired for this event must not be union members (Freedman 1985).
6. Many studies conclude that unions raise member wages by about 15 to 20 percent (Freeman and Medoff 1984), but such increases may enhance the income gap between low-wage workers and better paid union members (and the non-union workers who profit from union spillovers or when non-union firms pay higher wages to avoid the threat of unionization). Almost all studies, however, find that the net effects of stronger unions produce greater economic equality.
7. Because statistical power is critical, we include *all* years after 1950 with complete data. We begin in 1951 to follow precedent and avoid the years immediately after 1945 when the U.S. economy was not in equilibrium. The transfer of millions from the military into civilian employment and other postwar shifts produced drastic macroeconomic changes. Inflation reached 18.1 percent in 1946. By 1949, this rate had fallen below zero to –2.1 percent, only to increase to 5.9 percent the next year. Given currently available data, this sample is best for capturing the longitudinal determinants of U.S. family income inequality.
8. Other time-series estimators, such as VAR or state space models, require more cases, but no data at quarterly or monthly frequencies on inequality and other explanatory variables apparently exist, such that we must analyze 60 years. Information from the earlier years in this sample on earnings (Levy and Murnane 1992) and after-tax incomes are also unavailable. A longitudinal analysis that captures the determinants of these outcomes is not yet possible.
9. A study of the political determinants of inequality in other units would not be appropriate. In contrast to federal office holders, city, county, and state public officials do not control policies that have much influence on inequality. Hence, Brady, Baker, and Finnigan (2013) find that the relative political strength of either of the major political parties in states has no influence on state poverty rates. Two-way fixed-effects analyses conducted by one of the authors (not shown) also yield negligible relationships between the political strength of the state Republican parties and within-state income inequality.
10. When serial correlation is eliminated or not present and explanatory variables are lagged, bias attributable to simultaneity will not be present in properly specified time-series models.

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11. According to Johnston (1984:262), exhaustive models yield more accurate estimates: "It is more serious to omit relevant variables than to include irrelevant variables since in the former case the coefficients will be biased, the disturbance variance underestimated, and conventional inference procedures rendered invalid, while in the latter case the coefficients will be unbiased, the disturbance variance properly estimated, and the inference procedures properly estimated." We therefore include sufficient controls in these models.
12. Following Goldin and Katz (2008), who detect sharp linear departures between periods in returns to higher education, we entered periodized interactions with the higher education variable by specifying breaks located at the three inflection points they detected. But these efforts, along with attempts to use linear splines coded with breaks at the same points (also not shown), do not explain inequality.
13. These findings, and the results in Model 6 showing that the long reduction in manufacturing employment does not explain inequality, suggest that the many findings in economics that globalization had little effect on U.S. inequality are correct. See Krugman (1995) for an explanation.
14. In this model we drop the years when Obama was president, because he was unlikely to follow the neoliberal precedent established by Reagan or the other neoliberal presidents who followed Reagan.
15. Nixon was not a neoliberal. For example, "Nixon, not Johnson, oversaw the most rapid increase in domestic spending since the New Deal." Nixon supported "a huge expansion in Social Security [and he] created a national food stamp program. . . . Nixon, not Johnson, signed into law huge extensions in regulatory policy . . . creating the EPA, the Occupational Safety and Health Administration . . . [and] the Consumer Product Safety Commission" (Hacker and Pierson 2010:96–97). Although Nixon campaigned with code words such as "inner city" to emphasize race, street crime, and riots (Edsall and Edsall 1991; Mendelberg 2001), he did not enact neoliberal economic policies.
16. To test whether the contingent relationships reported in the tables differ significantly from zero (rather than from each other as evidenced by a significant interaction term), in models not shown we reverse the late and early dummy variables used in these two interactions and find that the coefficients on the early union and late presidential party variables do in fact always differ significantly from zero at beyond the .05 level in all models except Model 10.
17. The largest income gap stems from immense earnings—which may be based on political and other skills not well captured by schooling (Krugman 2007). Individual analyses that largely ignore such extreme earnings because they do not appear in most samples may exaggerate educational effects. SBTC effects, however, rest on both the demand *and* supply of skills (Goldin and Katz 2008), so our education indicator is an imperfect measure of the SBTC account. But an analysis of supply and demand is well beyond the scope of this study. For a sociological treatment, see Liu and Grusky (2013); for criticisms, see Card and DiNardo (2002).
18. An anonymous referee offers a perceptive comment on another social implication of neoliberalism by claiming that such policies represented "an assault on wage earners by favoring unearned over earned income. Corporate tax breaks and transfer pricing abuses became rampant while financial deregulation allowed investors to make money without employing a human soul." Such policies undercut "the very idea that the core normative activity in a capitalist economy is work."

References

Akard, Patrick J. 1992. "Corporate Mobilization and Political Power: The Transformation of U.S. Economic Policy in the 1970s." *American Sociological Review* 57(5):597–615.

Allen, Michael P. and John L. Campbell. 1994. "State Revenue Extraction from Different Income Groups: Variations in Tax Progressivity in the United States, 1916 to 1986." *American Sociological Review* 59(2):169–86.

Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. New York: Russell Sage.

Bartels, Larry M. and Henry E. Brady. 2003. "Economic Behavior in Political Context." *American Economic Review, Papers and Proceedings* 93(2):156–61.

Blank, Rebecca M. and Alan S. Blinder. 1986. "Macroeconomics, Income Distribution, and Poverty." Pp. 180–208 in *Fighting Poverty,* edited by S. H. Danziger and D. H. Weinberg. Cambridge, MA: Harvard University Press.

Bonica, Adam, Nolan McCarty, Keith T. Poole, and Howard Rosenthal. 2013. "Why Hasn't Democracy Slowed Rising Inequality." *Journal of Economic Perspectives* 27(3):103–124.

Brady, David, Regina S. Baker, and Ryan Finnigan. 2013. "When Unionization Disappears: State-Level Unionization and Working Poverty in the United States." *American Sociological Review* 78(5):872–96.

Brady, David A. and Kevin T. Leicht. 2008. "Party to Inequality: Right Party Power and Inequality in Rich Western Democracies." *Research in Social Stratification and Mobility* 26:77–106.

Brady, David A. and Benjamin Sosnaud. 2010. "The Politics of Economic Inequality." Pp. 521–41 in *Handbook of Politics,* edited by K. T. Leicht and J. C. Jenkins. New York: Springer.

Cancian, Maria and Deborah Reed. 1999. "The Impact of Wives' Earnings on Income Inequality: Issues and Estimates." *Demography* 36(2):173–84.

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Card, David. 2001. "The Effect of Unions on Wage Inequality in the U.S. Labor Market." *Industrial and Labor Relations Review* 54(2):296–315.

Card, David and John DiNardo. 2002. "Skill-Biased Technical Change and Rising Wage Inequality: Some Problems and Puzzles." *Journal of Labor Economics* 20(4):730–83.

Centeno, Miguel A. and Joseph N. Cohen. 2012. "The Arc of Neoliberalism." *Annual Review of Sociology* 38:317–40.

Dark, Taylor E. 1999. *The Unions and the Democrats: An Enduring Alliance*. Ithaca, NY: Cornell University Press.

Davis, Gerald F. 2011. *Managed by Markets: How Finance Re-Shaped America*. Oxford, UK: Oxford.

Derickson, Alan. 1994. "Health Security for All? Social Unionism and Universal Health Insurance, 1935–1958." *Journal of American History* 80(4):1333–56.

DiNardo, John E., Nicole M. Fortin, and Thomas Lemieux. 1996. "Labor Market Institutions and the Distribution of Wages, 1973–1992: A Semiparametric Approach." *Econometrica* 64(5):1001–1044.

DiPrete, Thomas A. 2007. "What Can Sociology Contribute to the Study of Inequality Trends? An Historical and Comparative Perspective." *American Behavioral Scientist* 50(5):603–618.

Edsall, Thomas B. and Mary D. Edsall. 1991. *Chain Reaction: The Impact of Race, Rights, and Taxes on American Politics*. New York: Norton.

Fligstein, Neil and Luke Dauter. 2007. "The Sociology of Markets." *Annual Review of Sociology* 33:105–128.

Freedman, Samuel. 1985. "Inaugural Roles Open for a Non-union Cast." *New York Times,* January 8, Section A, p. 1.

Freeman, Richard B. 2007. *America Works: The Exceptional U.S. Labor Market*. New York: Russell Sage

Freeman, Richard B. and James L. Medoff. 1984. *What Do Unions Do? A Twenty-Year Perspective*. New York: Basic Books.

Gerring, John. 1998. *Party Ideologies in America, 1828–1996*. New York: Cambridge.

Goldin, Claudia D. and Lawrence F. Katz. 2008. *The Race between Education and Technology*. Cambridge, MA: Harvard University Press.

Gottschalk, Peter and Timothy M. Smeeding. 1997. "Cross-National Comparisons of Earnings and Income Inequality." *Journal of Economic Literature* 35(2):633–87.

Greenstone, J. David. 1977. *Labor in American Politics*. Chicago, IL: Chicago.

Guetzkow, Joshua. 2010. "Beyond Deservingness: Congressional Discourse on Poverty, 1964–1996." *Annals of the American Academy of Political and Social Sciences* 629(May):173–97.

Hacker, Jacob S. and Paul Pierson. 2010. *Winner-Take-All Politics: How Washington Made the Rich Richer*. New York: Simon and Schuster.

Harvey, David. 2005. *A Brief History of Neoliberalism*. New York: Oxford.

Hibbs, Jr., Douglas A. 1987. *The American Political Economy: Macroeconomics and Electoral Politics in the United States*. Cambridge, MA: Harvard.

Johnston, Jack. 1984. *Econometric Methods*. New York: McGraw-Hill.

Kenworthy, Lane. 2004. "Rising Inequality Not a Surge at the Top." *Challenge* 47(5):51–55.

Kenworthy, Lane. 2007. "Inequality and Sociology." *American Behavioral Scientist* 50(5):584–602.

Korpi, Walter. 1985. "Power Resources Approach vs. Action and Conflict." *Sociological Theory* 3(2):31–45.

Krippner, Greta R. 2005. "The Financialization of the American Economy." *Socio-Economic Review* 3(2):173–206.

Krippner, Greta R. 2011. *Capitalizing on Crises*. Cambridge, MA: Harvard.

Krugman, Paul R. 1995. "America in the World Economy: Understanding the Misunderstandings." *Japan in the World Economy* 7(2):233–47.

Krugman, Paul R. 2007. *The Conscience of a Liberal*. New York: W. W. Norton.

Leicht, Kevin T. 2008. "Broken Down by Race and Gender? Sociological Explanations of New Sources of Earnings Inequality." *Annual Review of Sociology* 34:237–55.

Lenski, Gerhardt E. 1966. *Power and Privilege: A Theory of Social Stratification*. New York: McGraw-Hill.

Levy, Frank and Richard J. Murnane. 1992. "U.S. Earnings Levels and Earnings Inequality: A Review of Recent Trends and Proposed Explanations." *Journal of Economic Literature* 30(3):1333–81.

Lin, Ken-Hou and Donald Tomaskovic-Devey. 2013. "Financialization and U.S. Income Inequality, 1970–2008." *American Journal of Sociology* 118(5):1284–1374.

Liu, Yujia and David B. Grusky. 2013. "The Payoff to Skill in the Third Industrial Revolution." *American Journal of Sociology* 118(5):1330–74.

Lobao, Linda and Gregory Hooks. 2003. "Public Employment, Social Welfare and Local Well-Being." *Social Forces* 82(2):519–56.

Mares, Isabella. 2004. "Wage Bargaining in the Presence of Social Services and Transfers." *World Politics* 57(1):99–142.

McCall, Leslie and Christine Percheski. 2010. "Income Inequality: New Trends and Research Directions." *Annual Review of Sociology* 36:329–47.

Mendelberg, Tali. 2001. *The Race Card: Campaign Strategy, Implicit Messages, and the Norm of Equality*. Princeton NJ: Princeton University Press.

Meyer, David S. 2004. "Protest and Political Opportunities." *Annual Review of Sociology* 30:125–45.

Moene, Karl O. and Michael Wallerstein. 1995. "How Social Democracy Worked: Labor Market Institutions." *Politics and Society* 23(2):185–211.

Moller, Stephanie, Francois Nielsen, and Arthur S. Alderson. 2009. "Changing Patterns of Income Inequality in U.S. Counties, 1970–2000." *American Journal of Sociology* 114(4):1037–1101.

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Morris, Martina and Bruce Western. 1999. "Inequality of Earnings at the Close of the Twentieth Century." *Annual Review of Sociology* 25:623–57.

Mosher, James S. 2007. "U.S. Wage Inequality, Technological Change, and Decline in Union Power." *Politics and Society* 35(2):225–63.

Myles, John. 2003. "Where Have All the Sociologists Gone? Explaining Economic Inequality." *Canadian Journal of Sociology* 28(4):551–59.

Navarro, Vincente and Lieyu Shi. 2001. "The Political Context of Social Inequalities and Health." *International Journal of Health Services* 31(1):1–21.

Neckerman, Kathryn M. and Florencia Torche. 2007. "Inequality: Causes and Consequences." *Annual Review of Sociology* 33:335–57.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Belknap Press of Harvard University Press.

Rosenthal, Howard. 2004. "Politics, Public Policy, and Inequality: A Look Back at the Twentieth Century." Pp. 861–92 in *Social Inequality,* edited by K. M. Neckerman. New York: Russell Sage.

Rueda, David and Jonas Pontusson. 2002. "Wage Inequality and Varieties of Capitalism." *World Politics* 52(3):350–83.

Sassoon, Donald. 1996. *One Hundred Years of Socialism: The West European Left in the Twentieth Century*. London: Fontana Press.

Schlozman, Kay L., Sidney Verba, and Henry R. Brady. 2012. *The Unheavenly Chorus*. Princeton, NJ: Princeton University Press.

Sum, Andrew and Ishwar Khatiwada. 2012. "Ignoring Those Left Behind." *Challenge* 55(2):5–20.

Thorne, Melvin J. 1990. *American Conservative Thought since World War II*. New York: Greenwood Press.

Tomaskovic-Devey, Donald and Ken-Hou Lin. 2011. "Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy." *American Sociological Review* 76(4):538–59.

Tope, Daniel and David Jacobs. 2009. "The Politics of Union Decline: The Contingent Determinants of Union Recognition Elections and Victories." *American Sociological Review* 74(5):842–64.

van den Berg, Axel and Thomas Janoski. 2005. "Conflict Theories in Political Sociology." Pp. 72–95 in *The Handbook of Political Sociology,* edited by T. Janoski, R. Alford, A. Hicks, and M. Swartz. New York: Cambridge University Press.

Volscho, Thomas W. and Nathan J. Kelly. 2012. "The Rise of the Super Rich: Power Resources, Taxes, Financial Markets, and the Dynamics of the Top 1 percent, 1949 to 2008." *American Sociological Review* 77(5):679–99.

Voss, Kim and Rachel Sherman. 2000. "Breaking the Iron Law of Oligarchy: Union Revitalization in the American Labor Market." *American Journal of Sociology* 106(2):303–349.

Wade, Robert. 2012. "Why Has Income Inequality Remained on the Sidelines of Public Policy for So Long?" *Challenge* 55(3):21–50.

Western, Bruce. 2006. *Punishment and Inequality in America*. New York: Russell Sage.

Western, Bruce and Meredith Kleykamp. 2004. "A Bayesian Change Point Model for Historical Time-Series Analyses." *Political Analysis* 12(4):354–74.

Western, Bruce and Jake Rosenfeld. 2011. "Unions, Norms, and the Rise in U.S. Wage Inequality." *American Sociological Review* 76(4):513–37.

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